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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,213	07/17/2006	Masayuki Sakigawara	OHNO-40791	7849

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EXAMINER

KOVAL, MELISSA J

ART UNIT	PAPER NUMBER
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2862

NOTIFICATION DATE	DELIVERY MODE
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02/10/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/597,213	Applicant(s) SAKIGAWARA ET AL.	
	Examiner MELISSA J. KOVAL	Art Unit 2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 and 9 is/are allowed.
- 6) ☒ Claim(s) 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>January 26, 2009</u> . | 6) <input type="checkbox"/> Other: _____ |

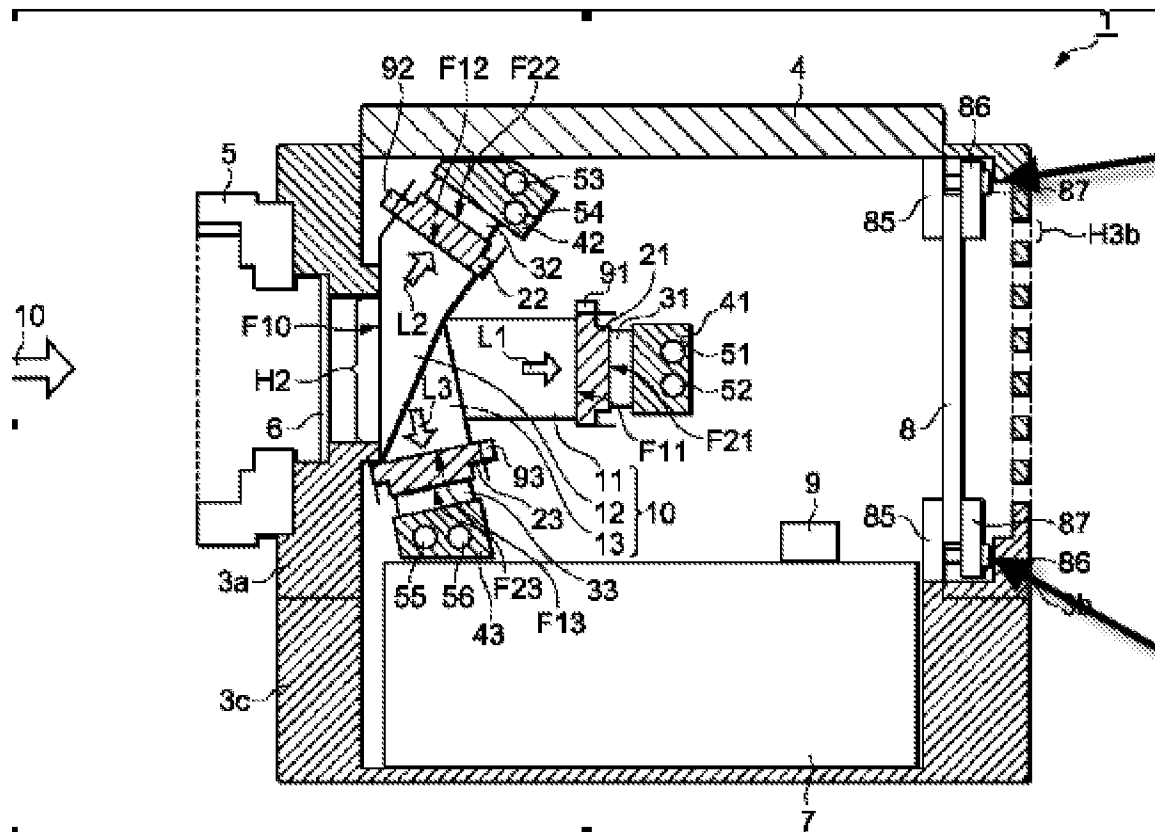
DETAILED ACTION***Claim Rejections - 35 USC § 103***

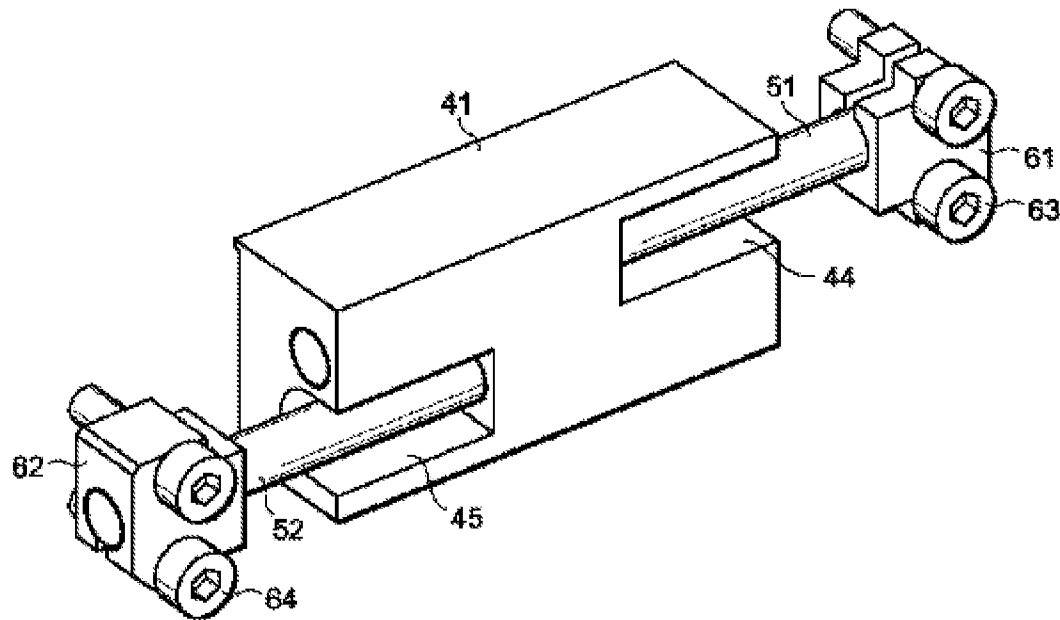
1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2003-143449 (machine translation in English attached).

3. Figures 5 and 8 are provided for applicant's convenience.





4. The examiner notes that the machine translation provided refers to different elements with the same numerals in the teaching. All of the individual elements claimed are met by the teaching of JP 2003-143449.

5. Claim 7 sets forth: "A monitor camera device comprising (Figures 1 through 3 show a solid state imaging device 1. See lens 6, color separation prisms 11, 12 and 13 with acceptance surfaces F11, F12 and F13 that describe typical components for a CCD or CMOS camera. Section [0005] and [0007] describe a television camera.):

a camera housing (casing 2) provided with a screw hole (Casing 2 includes several screw elements: screws 71, 72 are described in section [0076]-[0077]. Drawing 8 also suggests the presence of screws 63 and 64 connected to the heat pipes. And the examiner has drawn some arrows above to show where additional screw elements with inconsistent numbering appear.).

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a dehumidification regulation body having a dehumidification element (**See Peltier elements 31, 32, 33 associated with cooling blocks 41, 42 and 43 as well as heat pipes 55 through 56. See humidity sensor 9 connected to Image Processing Division section 7 and power supply section 85, 86.**), an electrode (**See electrolysis cell 8 comprising electrolyte membrane 83 arranged between anode 81 and cathode 82.**), and a regulation body member which has a screw shape and includes the dehumidification element and the electrode integrated therein (**See section [0050]**

[0050] This electrolysis cell 8 is pinched between the fixed part material 81 which consists of continuation ring formation arranged rather than the electrolysis cell 8 at the inside side of equipment and the fixed part material 83 which consists of continuation ring formation arranged rather than the electrolysis cell 8 at the exterior side of equipment 1. And the screw stop of the fixed part material 81 and 83 is carried out with a screw 83 in each rim section, and it is unified. Moreover, the fixed part material 81 is being fixed to the bottom panel 3c.

),

wherein the regulation body member is mounted to the screw hole of the camera housing (**Screws 71 and 72 are associated with heat pipes 51 through 56 and are not clearly shown in the Figures, however section [0076]-[0077] associates the screws with heat pipes 51 and 52, respectively. Furthermore see section [0085].**

[0085] The detection signal with which the Image Processing Division section 7 shown in drawing 4 is sent out from the temperature sensors 91, 92, and 93. It has the central controller 71 (refer to drawing 9) which controls the output of each solid state image pickup devices 21, 22, and 23, each Peltier devices 31, 32, and 33, and the electrolysis cell 8 based on the detection signal sent out from the humidity sensor 9.

The arrows drawn by the examiner to Figure 5, above, show screws that are positioned to effect the function electrolysis cell 8, power supply section 85, 86 and humidity sensor 9.)."

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[0076] The condensation section R3 of a heat pipe 51 and the side panel of the case cover 4 are connected by the fixed part material 61. This fixed part material 61 is arranged in the slot (not shown) formed in the side panel of a case cover 4, and has the fit-in section in which the portion of the condensation section R3 of a heat pipe 51 is inserted. And this fit-in section has the structure which binds tight the portion of the condensation section R3 of a heat pipe 51 from the side with a screw 71. Furthermore, this screw 71 has structure inserted in the slot formed in the case cover 4.

[0077] It connects so that thermal contact may be attained by the fixed part material 62 to which a heat pipe 52 also has a screw 72 on the other hand in the field of another side where a heat pipe 51 is not connected among the insides of the side panel which a case cover 4 counters mutually in the condensation section R3 side. The evaporator R1 side is inserted by the cooling block 41.

See section [0069] through [0072].

[0069] Namely, a heat pipe 51 is connected to the member (here cooling block 41) which one side of the ends of a pipe 57 should cool in the state which can be contacted thermal. It connects with the member (here case cover 4) for emitting the heat pumped up from the member which another side should cool in the state which can be contacted thermal. Here, as shown in drawing 8, make into an evaporator R1 the portion contacted by the member which should be cooled among the ends of a heat pipe 51, and let the portion of the other end of the opposite side of an evaporator R1 be the condensation section R3. Moreover, the field of the pipe 57 between the evaporator R1 of a heat pipe 51 and the condensation section R3 serves as the heat insulation section R2 for raising cooling efficiency.

[0070] And as shown in drawing 8, in an evaporator R1, evaporation of working fluid advances preferentially, and liquefaction of working fluid advances preferentially in the condensation section R3. The water evaporated by the evaporator R of the heat pipe 51 serves as a vapor stream FV by this, this vapor stream FV is transmitted to the condensation section R3 through the heat insulation section R2 by the difference of the vapor pressure in a heat pipe 51, and migration of heat takes place by liquefying there. Thus, far bigger quantity of heat than the heat transmission in metal will be conveyed by the heat transmission using condensation by the vapor stream and liquefaction which were evaporated.

[0071] Next, the composition of each cooling blocks 41, 42, and 43 is explained.

[0072] The cooling block 41 is for absorbing the heat emitted from Peltier device 31, and radiating heat to the evaporator R1 of heat pipes 51 and 52. Moreover, the cooling block 42 is for absorbing the heat emitted from Peltier device 32, and radiating heat to the evaporator R1 of heat pipes 53 and 54. Furthermore, the cooling block 43 is for absorbing the heat emitted from Peltier device 33, and radiating heat to the evaporator R1 of heat pipes 55 and 56. Hereafter, the cooling block 41 is made into representation and explained.

6. The teaching clearly shows that electrodes and screws are used for regulating humidification inside the housing of a solid state camera device. See sections [0038]-[0039] in addition to the teachings applied above.

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[0038] This case cover 4 functions as a heat sink, and the slot formed in abbreviation parallel in the normal line direction of the front panel 3a is formed in the surface by the side of the exterior of each panel which constitutes a case cover 4 in the shape of a stripe at the predetermined gap. Thus, the radiation efficiency of a case cover 4 can be raised by forming a slot.

[0039] And the screw stop of the case main part 3 and the case cover 4 is carried out, for example, and they are connected. Moreover, each panel which constitutes these case main parts 3 and case covers 4 is formed as a component which has thermal conductivity, such as aluminum, for example.

7. The examiner asserts that despite the discrepancies in the teaching, one having ordinary skill in the art at the time of the invention was made would be able to modify the teaching of JP-2003-143449 to meet the limitations of claims 7 and 8, because all of the required elements are present for the purpose of controlling humidity and temperature within the camera housing. It is well-known in the art that controlling the temperature of the elements comprising the imaging device extends the life of the camera. Furthermore, It would have been obvious for one having ordinary skill in the art to make the modification with a reasonable expectation of success.

8. Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains’ “. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007). The question of obviousness is resolved on the basis of underlying factual determination including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). See also *KSR*, 127 S. Ct. at 1734, 82 USPQ2d at 1391 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”). The Court in *Graham* further noted that evidence of secondary considerations, such as commercial success, long felt but unsolved needs, failure of others, etc., “might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” 383 U.S. at 18, 148 USPQ at 467. “if a court, or patent examiner, conducts this analysis and concludes the claimed subject matter was obvious, the claim is invalid under §103.” *KSR*, 127 S. Ct. at 1734, 82 USPQ2d at 1391.

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The mere existence of differences between the prior art and the claim does not establish nonobviousness. *Dann v. Johnston*, 425 U.S. 219, 230, 189 USPQ 257, 261 (1976). The issue is “whether the difference between the prior art and the subject matter in question “is a difference sufficient to render the claimed subject matter unobvious to one skilled in the applicable art.’ “ *Dann*, 425 U.S. at 228-29, 189 USPQ at 261 (citation omitted). To be nonobvious, an improvement must be “more than the predictable use of prior art elements according to their established function.’ *KSR*, 127 S. Ct. at 1740, 82 USPQ2d at 1396.

In *KSR*, the Supreme Court emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art, “*id.* At 1739, 82 USPQ2d at 1395, and discussed circumstances in which a patent might be determined to be obvious. In particular, the Supreme Court emphasized that “the principles laid down in *Graham* reaffirmed the obviousness”). However, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill would employ.” *Id.* The court cautioned that “[a] factfinder should be aware, of course, of the distinction caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *Id.* At 1742, 82 USPQ2d at 1397.

The court noted that “[in] many fields it may be that there is little discussion of obviousness techniques or combinations, and it often may be the case that market demand , rather than scientific literature, will drive design trends.’ *KSR*, 127 S. Ct. at 1741, 82 USPQ2d at 1396. “Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.’ *Id.* At 1742, 82 USPQ2d at 1397. The Court also noted that “[c]ommon sense teaches...that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.’ *Id.* At 1742, 82 USPQ2d at 1397. “A person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.*

Furthermore, the Supreme Court explained that “{w}hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp.” *KSR*, 127 S. Ct. at 1742, 82 USPQ2d at 1397. “If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense, “*id.* And, in such an instance” the fact that a combination was obvious to try might show that it was obvious under §103” *id.*

The level of ordinary skill in the art may be evidenced by the prior art references. In *re GPAC Inc.*, 57 F.3d 1573, 1579, 35 USPQ2d 1116, 1121 (fed. Cir. 1995) (“Although the Board did not make a specific finding on skill level, it did conclude that the level of ordinary skill in the art...was best determined by appeal to the references of record....We do not believe that the Board clearly erred in adopting this approach.”); see also *In re Oelrich*, 579 F.2d 86, 91, 198 USPQ 210, 214 (CCPA 1978) (“the PTO

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usually must evaluate both the scope and content of the prior art and the level of ordinary skill solely on the cold words of the literature”).

In sustaining a multiple reference rejection under 35 U.S.C. §103(a), the Board may rely on one reference alone without designating it as a new ground of rejection. In re Bush, 296 F. 2d 491, 496, 131 USPQ 263, 266-67 (CCPA 1961); in re Boyer, 363 F. 2d 455, 458 n. 2, 150 USPQ 441, 444 n.2 (CCPA 1966).

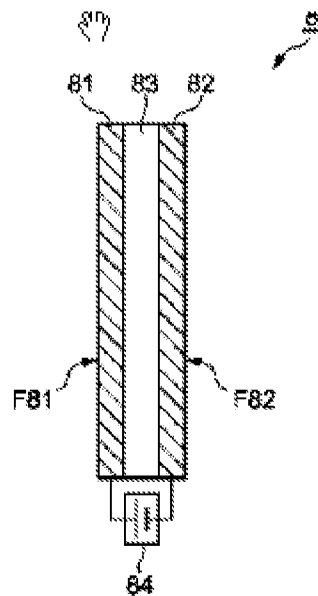
During examination of patent application, a claim is given its broadest reasonable construction consistent with the specification. In re Prater, 415 F 2d. 1393, 1404-05, 162 USPQ 541, 550-51, (CCPA 1969). “[T]he words of a claim ‘are generally given their ordinary and customary meaning.’ “

Phillips v. AWH Corp., 415 F. 3d 1303, 1312, 75 USPQ2d 1321, 1326 (Fed. Cir. 2005) (en banc) (internal citations omitted). The “ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* At 1313, 75 USPQ2d at 1326.

9. Claim 8 sets forth: “The monitor camera device according to Claim 7, wherein the dehumidification element comprises a solid high-polymer electrolyte film, and the solid high-polymer electrolyte film (**See polymer electrolyte membrane 83**) is arranged so as to close up an opening provided on the regulation body member so as to communicate an inside and an outside of the housing”.

10. **Electrolysis cell 8 includes polymer electrolyte membrane 83. See section [0040]-[0050], for example. Also as seen in Figure 5, electrolysis cell 8 is disposed parallel to vents H3b such that the readings for humidity sensor 9 are affected and such that the ventilation openings are covered indirectly. Also voltage impression section 84, is electrically connected to elements 81-83 as shown in Drawing 6 as well as connected to central controller 71.**

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Drawing 6

11. **Electrolysis cell 8 is attached to back panel 3b that is also attached to panel 3c, for creating a sealed space for the imaging components.**

Allowable Subject Matter

12. Claims 1-6 and 9 are allowed.
13. The following is an examiner's statement of reasons for allowance:
14. For claims 1 and 9, respectively, the closest prior art of record neither shows nor suggests:
- “the dehumidification regulation body being configured so that one end of the electrode penetrates through the engaging portion of the dehumidification regulation body, the dehumidification regulation body being detachably attached to the camera housing by the engaging portion of the dehumidification regulation body and the engaged portion of

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the camera housing”

or

“a dehumidification element,

an engaging portion that engages an engaged portion of a camera housing within a

through hole of the engaged portion through the camera housing, and

an electrode whose one end supplies a power source to the dehumidification element

and the other end penetrates through the engaging portion, wherein the

dehumidification regulation body is detachably attached to the camera housing by the

engaging portion of the dehumidification regulation body and the engaged portion of the camera housing”.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference is cited as background art only.

Otsuka U.S. Patent 5,003,401 teaches an apparatus for adjusting of optical axes in TV camera.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA J. KOVAL whose telephone number is (571) 272-2121. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MELISSA J KOVAL/
Primary Examiner, Art Unit 2862

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Primary Examiner
Art Unit 2862

MJK